

**Summary of Public Comments and Responses
REGIONAL HAZE SIP AND ASSOCIATED RULES
November 7, 2003**

REGIONAL HAZE SIP AND APPENDICES, ORGANIZED BY ISSUE

GENERAL COMMENTS

Comment: I am writing to express my strong support for the adoption and implementation of the strongest possible Utah state plan for regional haze in all five national parks in Utah. I have witnessed haze in many parks around the nation, from the Grand Canyon to Great Smoky Mountains. I want Utah's parks to remain clean, healthy, and pristine. These parks attract tourist and this tourism is crucial to Utah's current and future economy. (Richard Spotts, St. George)

Response: Noted.

Comment: Utah's proposed plan appears to address all the major components required for inclusion in SIPs as specified in Utah's regional haze rule. (Stephen P. Martin, Intermountain Region, National Park Service)

Response: Noted.

CLEAN AIR CORRIDORS

Comment: We agree with the Department's characterization of the clean air corridor requirements. Although it is unlikely that the emissions increase threshold will be triggered, we urge the State to consider that emission increases may not necessarily influence all Class I areas on the Colorado Plateau on the least-impaired days. Efforts should be taken to further refine the underlying meteorology and modeling for demonstrating impacts on the least impaired days. (William K. Lawson, PacifiCorp)

Response: The State agrees that analysis of impact should address each Class I area individually, and that refinements are needed in meteorological and monitoring data for demonstrating impacts of emissions coming from the clean air corridor. WRAP's periodic "Causes of Haze" reports will provide more robust understanding of clean air corridors in the future.

STATIONARY SOURCES: MILESTONES AND BACKSTOP TRADING PROGRAM

Comment: In the section on the milestones there is one minor error. It says that compliance will be based on a three-year average of emissions. That is correct except for the first two years as shown in the table later on in the document. (Wayne Leipold, Phelps Dodge)

Response: The language in Part D is an executive summary of the stationary source program, and all of the details are addressed in Part E. There is language further on in Part D that explains how the averaging will work, and the years 2003, 2004 and 2018 are addressed in that section.

Comment: As the result of the uncertainty created by the US Court of Appeals decision on the “American Corn Growers Association” challenge to the regional haze rule, it would be premature for the State of Utah to take any administrative action by choosing either 40CFR 51.309 or 40CFR 51.308 as an option to address regional haze. (Terry Ross, Center for Energy and Economic Development)

Response: EPA’s approval of the Annex on June 5, 2003 addressed the impact of the May 24, 2002 American Corn Growers Decision (Federal Register, Vol. 68, No. 108, pages 33766 – 33767). The approval notice states, “The American Corn Growers court decision did not address the provisions in the regional haze rule allowing States to adopt a trading program or other alternative measures in place of source specific measures for BART sources.” The State of Utah has developed a SIP under section 309 of the RH rule based on years of work with the GCVTC and WRAP that identified the best approach to address regional haze on the Colorado Plateau. The approach is flexible, and addresses all of the significant sources of haze in the west. The American Corn Growers decision does not change these underlying reasons for implementing the regional approach allowed under section 309 of the RH rule.

Comment: The effect of the American Corn Growers decision is that EPA will need to revise the BART provisions, and this could have a ripple effect throughout the entire rule. The State of Utah should revise its SIP proposal to notify the public of the decision and assess the impact of that decision. (Terry Ross, Center for Energy and Economic Development)

Response: As noted above, EPA addressed the impact of the American Corn Growers decision in the FR action that approved the Annex. The June 5, 2003 approval of the Annex established the requirements that a state must meet to submit a SIP under section 309 of the RH rule, and Utah is developing this SIP in accordance with that final rule.

Comment: It has not been shown that the Annex will achieve a humanly perceptible improvement in visibility impairment. All of the other provisions (e.g. fire, mobile sources, pollution prevention, etc.) are illusory. (Terry Ross, Center for Energy and Economic Development)

Response: EPA’s approval of the Annex on June 5, 2003 states, “The EPA continues to believe that the milestones provide for ‘greater reasonable progress than BART’ and for ‘steady and continuing progress.’” (FR Vol. 68, No. 108, page 33769) The GCVTC strategies that are the basis for Utah’s proposed SIP are focused on achievable emission reductions from all of the emission sources that contribute to regional haze. 40 CFR 51.309(a) states, “If a transport region State submits an implementation plan which is approved by EPA as meeting the requirements of this section, it will be deemed to comply with the requirements for reasonable progress for the period from approval of the plan to 2018.”

Comment: The economic analysis for the Annex is not adequate. This analysis shows a disproportionate cost impact on downwind states such as Wyoming, Colorado and New Mexico. (Terry Ross, Center for Energy and Economic Development)

Response: The economic analysis for the Annex supported the earlier GCVTC conclusions that an incentive-based market trading program is more cost-effective than a traditional command-and-control approach. An incentive-based program allows sources

in all of the states to find the most cost-effective strategies to reduce SO₂ emissions that affect regional haze on the Colorado Plateau as well as other Class I areas that were not addressed by the Annex.

Comment: The Annex was based on unrealistic cost assumptions for natural gas that creates a bias against coal. The Annex will create a disincentive for constructing new coal-fired power plants. (Terry Ross, Center for Energy and Economic Development)

Response: The Annex was negotiated using the best information available at that time. However, the Market Trading Forum included uncertainty factors in the analysis to address changes in the underlying assumptions. More importantly, a regional emission cap allows flexibility to adapt to changing circumstances while still achieving the same or better environmental goals. If natural gas prices remain high, the cap will create an incentive to overcontrol existing sources to make room under the cap for new, highly-controlled coal-fired power plants.

Comment: Regional haze strategies should be coordinated with the multi-pollutant legislation that is being debated by Congress. (Terry Ross, Center for Energy and Economic Development)

Response: It is not clear when, or if, Congress will pass multi-pollutant legislation. If legislation is passed, Utah will need to review its regional haze strategy at that time to see if there are any impacts.

Comment: I do not share WRAP's faith (for 'faith' is what it is) in the market-based 'backstop trading' program. When we hit the regional cap for visibility impairment, as we inevitably will do before many years pass, we will have to revisit this program, iteratively. (Ivan Weber, Weber Sustainability Consultants)

Response: The backstop trading program is fully enforceable to ensure that milestones are met. The program will be revisited regularly, both in comparing actual emissions against the cap annually, and in the SIP review and revisions that are due in 2008, 2013, and 2018.

Comment: The EPA Nonroad Diesel Rule, at the minimum level of aggressiveness drafted by EPA, or 'better' is imperative to RHR goal attainment. WRAP's own comments on the Nonroad Diesel Rule asked EPA to accelerate the implementation schedule and to deny exemptions, delays and exceptions requested by companies, particularly in the equipment manufacturing sector. This is critical to the Salt Lake Valley, as you know, because of the proximate Bingham Canyon Mine, but also because of the massive amount of construction on roads that has characterized the past few years. This latter activity promises to increase, along with housing and other infrastructure construction to accompany the projected trebling or quadrupling of Wasatch Front population by 2050. (Ivan Weber, Weber Sustainability Consultants)

Response: Utah supports the WRAP's comments regarding EPA's Nonroad Diesel Rule.

Comment: Please also enter into the record consideration of the new climate change regional study, to which I referred at the hearing last week: *Preparing for a Changing Climate: The Potential Consequences of Climate Variability and Change, Rocky Mountain/Great Basin*. A Report of the Rocky Mountain/Great Basin Regional Assessment Team, for the U.S. Global Change Research Program, Feb. 2003. Frederic H. Wagner, Principal Author and Editor. May be obtained from Dr. Fred Wagner, Utah State Univ. Ecology Center, Logan, UT 84322-5205,

telephone (435)797-2555, email ecol@cc.usu.edu. The implications of this very thorough report's findings are potentially profound for this region, as you will discover. (Ivan Weber, Weber Sustainability Consultants)

Response: Noted.

Comment: Under this Plan, coal fired electric utilities in Utah are allowed to expand and emit more visibility impairing pollutants. (Nina Dougherty, Sierra Club)

Response: The proposed regional haze SIP establishes a declining regional SO₂ cap with enforceable milestones. The cap does not limit SO₂ emissions in Utah, but requires the reductions to occur in the region. Modeling performed by the WRAP contractor, ICF, indicated that future electrical demand would not concentrate SO₂ emission increases in Utah, and that emission decreases would occur throughout the region. This SIP will be a complement to other existing programs, such as the Prevention of Significant Deterioration (PSD) permitting program, that will require new coal-fired power plants to meet stringent emission limitations and prevent significant deterioration of air quality in Utah's Class I areas.

Comment: An assessment of the contribution of NO_x emissions to visibility impairment in Utah is brushed aside for five years. (Nina Dougherty, Sierra Club)

Language used by the State indicates that some determination of the need for NO_x-PM strategies has already been made, perhaps giving the impression that there may be little future concern for these pollutants as regional haze contributors. The NPS would prefer based on the incompleteness of the current WRAP work on this subject, that the State stress the ongoing assessment of visibility impacts of NO_x and PM and the potential control strategies to address those impacts. It would be appropriate to indicate that determinations of these impacts and strategies will be addressed in future revisions of the plan, and would better reflect the current status to state that the State cannot determine what level of control, if any, would be appropriate for NO_x and PM through a stationary source milestone program. (Stephen P. Martin, Intermountain Region, National Park Service)

Response: Utah's SIP reflects the requirements of 40 CFR 51.309 by committing to address NO_x and PM emissions from stationary sources in the 2008 SIP revision. The GCVTC and WRAP concentrated on sulfur dioxide emission reductions because SO₂ was the most significant contributor to visibility impairment from stationary sources. Now that the work on SO₂ has been completed, the WRAP is beginning the technical and policy analysis that will be needed to make informed decisions about NO_x and PM for the 2008 SIP revision. DAQ staff agree with both commenters that further work is needed to evaluate the impacts of NO_x and PM emissions.

Section XX.D.5 of the SIP has been revised as follows in response to these comments, and to incorporate the conclusions of the final NO_x/PM report that was presented to the WRAP on October 15, 2003. The final report will replace the earlier draft report in the TSD for the SIP.

5. Report on Assessment of NO_x/PM Strategies

Assessment of Need for NO_x and PM Milestones. Pursuant to 40 CFR 51.309(d)(4)(v), the State of Utah has evaluated the need for NO_x and PM emission control strategies, the degree of visibility improvement expected, and

whether such milestones are needed to avoid any net increase in these pollutants. This evaluation was based on an assessment of NO_x and PM stationary source emissions made by the WRAP Market Trading Forum for all WRAP states, including the transport region states.¹

Several conclusions were reached based on current analyses.

- For the vast majority of Class I areas throughout the WRAP region, stationary source NO_x and PM emissions are not a major contributor to visibility impairment on the average 20% best and 20% worst days. However, on some of the worst days nitrates and PM are the main components of visibility impairment.*
- Stationary source NO_x emissions are projected to increase by 4% between 1996 and 2018. Stationary source NO_x emissions probably cause 2% - 5% of the visibility impairment on the Colorado Plateau.*
- Stationary source PM emissions are projected to increase by 29% between 1996 and 2018. Stationary source PM emissions probably cause less than 2% of the regional visibility impairment.*
- The current regional modeling does a poor job of predicting nitrate concentrations in the winter when NO_x has the greatest impact on visibility impairment. The modeling also does a poor job of predicting the impact of localized fugitive dust impact. The WRAP is currently making significant improvements to the model and to the emission inventories to address these issues.*
- There is a wide range of emission reduction techniques available to control NO_x and PM emissions, and many of the technologies are cost-effective. The current emission inventory does not contain enough information to determine what technologies are currently in place in the West and the cost of additional controls.*
- RAVI remedies are available in cases where particular stationary sources may impact particular Class I areas.[*
- ~~The need for stationary source NO_x and PM milestones is not supported at this time with current state of analyses, but the need for milestones should be reassessed based on more complete and accurate analyses prior to submittal of the 2008 SIP revisions.~~*
- The absolute need for milestones to support potential market-based programs is not yet established.]*

The complete[s] report is provided in the Utah TSD Supplement. The State of Utah ~~[has determined that]~~ is not able to determine the need for NO_x and PM emission reduction strategies ~~[are not needed based on current information]. The State of Utah will review the need for long-term strategies for stationary sources of NO_x and PM during the SIP revision updates due in 2008, 2013, and 2018]~~ or the need for NO_x or PM milestones at this time. The State of Utah will continue to work with the WRAP to improve the emission inventories and regional modeling to support future policy decisions regarding stationary source NO_x and PM emissions.

The State of Utah will submit an implementation plan revision by December 31, 2008, to incorporate any necessary long-term strategies and BART

requirements for stationary source PM and NOx (including enforceable limitations, compliance schedules, and other measures) as required under 40 CFR 51.309(d)(4)(v).

Comment: The Market Trading Forum agreed to allow an increase in emissions in Utah, presumably on the basis that there would be a reduction in emissions in other states in the agreement, and, therefore, a net reduction in regional emissions. Possible problems are: (a) only five states out of the original nine will be in the market trading program and (b) the other states are also facing proposals for new traditional coal fired power plants. Because of the new energy situation, it would seem that there needs to be a careful, continuing inventory of emissions in the different states in the region, with appropriate action, such as Provision L.2.(2) "If the state finds that the implementation plan is inadequate to ensure reasonable progress due to emissions from outside the state, Utah shall notify EPA and the other contributing state(s), and initiate efforts through a regional planning process to address the emissions in question." The best time to address new emissions is during the permitting process rather than after construction and operation of the new facilities. (Nina Dougherty, Sierra Club)

Response: Because regional SO₂ emissions are capped, any new coal-fired power plants must "find room under the cap" for their new SO₂ emissions. This is the advantage of a mass-based cap as opposed to a traditional command-and-control approach that would not address the cumulative effects of new source growth. Modeling performed by the WRAP contractor, ICF, indicated that future electrical demand would not concentrate SO₂ emission increases in Utah or any other state, and that emission decreases would occur throughout the region. The proposed SIP will track SO₂ emissions in Utah and in the 5-state region on an annual basis for comparison to the regional milestone. The 5-year SIP reviews in 2008 and 2013 will provide an opportunity to review progress and assess whether the current implementation plan elements and strategies are sufficient to enable Utah to meet all established reasonable progress goals.

Comment: A GCVTC analysis of the contribution of nitrates to visibility impairment found that nitrates were an important pollutant at Canyonlands. This would indicate that Utah should have a good reason to assess the contribution of NO_x to visibility impairment. In addition, the recent WRAP report, "Stationary Source NO_x and PM Emissions in the WRAP Region: An Initial Assessment of Emissions, Controls, and Air Quality Impacts," October 1, 2003, is not reassuring in supporting the idea of insignificance of nitrates in visibility impairment. The report states that "stationary source NO_x emissions result in nitrates that probably cause about 2-5% of the impairment on the Colorado Plateau," with a footnote that says, "Some of the 20% haziest days, however are dominated by nitrate....During the 20 percent worst days on the Colorado Plateau, nitrate aerosols are responsible for about 6 to 18 percent of the man-made visibility impairment, although on some of these days they are responsible for as much as 40-60%". (p. I-3, I-4) The report adds that stationary sources have unique emission characteristics which may disproportionately impact visibility. There are also problems with the model--it works best in the summer months, a period when nitrate concentrations are low. It is stated that the current model produces uncertain results; more complete and accurate modeling results are needed. The report also emphasizes that "In addition to the modeling results, consideration should be given to meeting the reasonable progress goals of the regional haze rule, which generally imply a steady and continuous reduction in emissions and a prevention of degradation on the best visibility days." P. I-8 A problem with waiting five years for an assessment of the contribution of NO_x and nitrates in Utah is that during that time period there will be notices of intent for new projects (just as there are right now) which would increase NO_x emissions in Utah. It is better to tackle NO_x reduction during the permitting stage than after construction and operation. We would hope

that NOx modeling could begin when the modeling capability has improved, and that regional inventorying of operating and proposed NOx emissions is continuous. (Nina Dougherty, Sierra Club)

Response: The proposed SIP commits to address the impact of stationary source NOx and PM emissions and the possible need for a regional cap to address growth in these pollutants in the 2008 SIP revision. As the commentor notes, modeling and inventory improvements are needed to better understand the impacts of these two pollutants. It is premature to draw policy conclusions regarding the impact of these pollutants from existing sources at this time. As described in the response to an earlier comment, the SIP has been revised to incorporate the conclusions from the final NOx/PM report. Between now and 2008, the Regional Haze SIP will complement other programs, such as the PSD permitting program, that require new sources of NOx and PM to meet stringent emission limitations and prevent significant deterioration of air quality in Utah's Class I areas.

Comment: Reasonably Attributable Visibility Impairment (RAVI). This is a very important provision to address the geographic aspect of sources near Class I areas in the context of regional haze. We hope the RAVI procedure will be used, such as in examining the impact of NOx and other emissions from the Hunter and Huntington units on visibility in Canyonlands. (Nina Dougherty, Sierra Club)

Response: Utah's current visibility SIP addresses reasonably attributable visibility impairment (RAVI). Section XX.D.4 of the SIP addresses the relationship between the existing RAVI SIP and the new regional haze SIP. This section states, "If the National Park Service certifies impairment, the State of Utah will fulfill its obligations to determine attribution and if necessary determine BART for the applicable source or group of sources in accordance with Utah's SIP for visibility protection submitted to EPA on April 26, 1985 and approved on May 30, 1986."

Comment: The title of section XX.D.2 should be changed to reflect the specific requirement in 309. (William K. Lawson, PacifiCorp)

Response: The title has been changed as follows. "Achievement of a 13% or Greater ~~Greater than 13%~~ Reduction ~~in~~ of Sulfur Dioxide by 2000."

Comment: The text in XX.D.3.a should mirror the language in 40 CFR 309 that requires the milestones to achieve "greater reasonable progress than BART." (William K. Lawson, PacifiCorp)

Response: The second sentence in XX.D.3.a has been changed as follows. "~~The Regional Haze Rule requires that total reductions by 2018 be "better than BART", that is, greater than could be achieved by retrofitting 250 tons per year sources that were built between 1962 and 1977 and currently are operating without modern emission controls. The Annex demonstrated that the 2018 regional sulfur dioxide milestone provides for greater reasonable progress than would be achieved by application of best available retrofit technology (BART), as required by 40 CFR 51.309(f)(1)(i).~~

Comment: PacifiCorp urges Utah to continue working with the federal land managers in order to refine the approach that will be used to address RAVI given that regional emissions are being reduced under the haze program. There are still a few significant policy issues that remain to be resolved (e.g., data interpretation methods revealing significant emission spikes within class I

areas that would qualify them as genuine “hot spots” and identifying a portfolio of remedies if they become necessary). (William K. Lawson, PacifiCorp)

Response: The State of Utah is working with the National Park Service to finalize a Memorandum of Agreement regarding the circumstances that would lead to a certification of impairment within the context of a regional haze SIP that establishes a declining SO₂ emission cap. A draft MOA developed by the WRAP Market Trading Forum is included in the TSD to the RH SIP. DAQ staff agree with PacifiCorp that the resolution of any “hot spot” issues could be addressed with different remedies that achieved similar or better results. DAQ intends to work with the Federal Land Managers as new visibility data are gathered through the IMPROVE network to ensure that there are common understandings and agreements about visibility trends in the Class I areas.

Comment: PacifiCorp recommends that the State be very cautious about adjusting the interim milestones due to changes in flow measurement techniques at electric generating utilities, and recommends that the State rely on the emissions that utilities report to EPA under the acid rain program rather than focusing on relatively minor changes in the milestones. (William K. Lawson, PacifiCorp)

Response: The WRAP Market Trading Forum discussed at length the issue of “paper” emission changes due to new flow measurement techniques. There was concern that these changes would undermine the goals of the Annex because real emission reductions would not occur, even though the reported emissions would show a decrease. The SIP provisions related to flow rate measurement methods were designed to ensure that actual emission reductions take place. These measures need to remain in place so that we can determine the scope of the “paper changes” that have occurred since 1999. The measures are also specifically required by 40 CFR 51.309(h)(1)(iv).

Comment: Revise XX.E.1.d.(2)(b) – at the end of this subsection, add the following sentence: “The draft report will be posted on the WRAP website for a period of public review and comment for not less than 30 days.” (William K. Lawson, PacifiCorp)

Response: The change has been made as recommended.

Comment: Revise XX.E.1.d.(3) as follows – “(3) Consensus decision: The executive secretary commits to meet with the participating states and tribes in March 2014 to discuss any comments received on the 2018 emission projections in the draft report. The participating states and tribes will decide through a consensus process, whether it can be determined that the 2018 milestone will not be met, and whether it is necessary to trigger the WEB trading program early in order to meet the SO₂ emission reduction goals in 2018.” (William K. Lawson, PacifiCorp)

Response: The suggested language has not been added to the SIP. The purpose of the 2013 review is to determine whether we are heading into trouble so that the participating states and tribes can avoid a major non-compliance issue in 2018. If the 2018 penalty provisions are triggered, it will be a failure of the expected process, and sources in Utah would face significant financial penalties. By triggering the trading program, the states will use the backstop regulatory program to ensure that sources remain in compliance and that the goals of the program are met. The decision will be based on the best information available, but because the states and tribes will be using emission projections, there will always be some uncertainties in the numbers. It cannot be “determined that the milestones will not be met” with absolute certainty, and the proposed language could be

interpreted to require certainty. The milestones are designed so that market forces and the incentive of avoiding a regulatory program will drive emission reductions rather than a regulatory program. The states and tribes will not trigger the trading program in 2013 unless this incentive process does not appear to be effective. The decision will not be made lightly. However, it is impossible to identify all of the factors that must be considered in this decision process at this point in time.

Comment: In Table 4, correct the tonnage for the Ute Indian Tribe in years 2008-2018 from 1,129 to 1,135. Also, the second half of Table 4, for years 2011 - 2018, is missing. (Laurel Dygowski, EPA Region 8)

Response: The corrections have been made.

Comment: In E.1.c(4)(b), the reference to Table 3 should be Table 5. (Laurel Dygowski, EPA Region 8)

Response: The correction has been made.

Comment: In E.1.d.(2)(b), "2013" should be added after December 31. (Laurel Dygowski, EPA Region 8)

Response: The correction has been made.

Comment: In E.3.i(2)(b), the reference to SIP Section XX.E.5.k(1)(b) should be XX.E.3.k(1)(b). (Laurel Dygowski, EPA Region 8)

Response: The correction has been made.

Comment: In E.3.k(2), it would be helpful to add the sentence from the model SIP stating, "More details on liabilities for different provisions can be found in the provisions of [state or tribe market trading rule]." It is an informative statement that can help direct people to appropriate liability provisions. (Laurel Dygowski, EPA Region 8)

Response: The sentence has been added.

R307-250. WESTERN BACKSTOP SULFUR DIOXIDE TRADING PROGRAM.

Comment: The Utah Code should be cited as Title 19, Chapter 2 of the Utah Code, and, in R307-250-12(4)(a) and (b), the more specific reference should be to "Section 19-2-115 of the Utah Code." (Kent Bishop, Governor's Office of Planning and Budget)

Response: These corrections have been made.

Comment: In section-13, sub-section (1) includes the following text:

"... the following provisions shall apply for the 2018 emissions year."

The question here that arises, is "what is an emissions year?" Again, that term is not defined. Is it some portion of a calendar period, or not? Does some emissions release event start a clock ticking, or not? This should be defined. (Kent Bishop, Governor's Office of Planning and Budget)

Response: The wording of this section was discussed extensively by the working group, made up of staff from EPA and the five states writing SIPs under 40 CFR 51.309, that drafted the Model Rule from which each state drafted a rule that fits its own rule-writing requirements. This term was chosen by the working group, and, in the context of the entire rule, is clear in its meaning. The working group chose not to use the term "2018 calendar year" because this provision will be applied retrospectively one or more years after the end of 2018.

Comment: In R307-250-9(1)(a)(ii)(D), the reference to R307-250-9 should be R307-250-9(9), the section on petitions. This provides a more specific reference for sources concerning how they would submit a petition. (Laurel Dygowski, EPA Region 8)

Response: The correction has been made.

Comment: In R307-250-9(1)(b)(ii) and (iii), the references to R307-250-9 should be to R307-250-9(6)(a) to be more specific as to the section a source needs to see for deadlines. (Laurel Dygowski, EPA Region 8)

Response: The correction has been made.

Comment: In R307-250-9(1)(b)(viii), the last sentence should be changed from "...under (2) below" to "...under R307-250-9(1)(b)(ii)." (Laurel Dygowski, EPA Region 8)

Response: The correction has been made.

Comment: In R307-250-9(2)(d)(i), the last sentence should be changed to reflect that the last Appendix referenced is Appendix E to the SIP. (Laurel Dygowski, EPA Region 8)

Response: The corrected language is "...in ~~the~~ Appendix B of SIP Section XX..."

Comment: R307-250-13(1)(b) should read "...under SIP sections XX.E.3.a and XX.E.4. (Laurel Dygowski, EPA Region 8)

Response: The correction has been made.

Comment: PacifiCorp is concerned that the proposed rule language may not reflect the proposed SIP language concerning the treatment of category 2 WEB sources which receive their floor allocation from the new source set-aside. This should also be reflected in the proposed SIP subsection dealing with distribution of the new source allocation. (William K. Lawson, PacifiCorp)

Response: The language in R307-250-7(6)(a) has been revised as follows to conform with the allocation process outlined in section XX.E.3.a(iii) of the SIP. "A new WEB source may apply to the executive secretary for an allocation from the new source set-aside, as outlined in SIP section XX.E.3.c. A new WEB source is eligible for an annual floor allocation equal to the lower of the permitted annual sulfur dioxide emission limit for that source, or sulfur dioxide annual emissions calculated based on a level of control equivalent to BACT and assuming one hundred percent utilization of the WEB source, beginning with the first full calendar year of operation. ~~after the source has commenced~~

~~operation.~~

The language in SIP section XX.E.3.c(1)(a) has been revised as follows. “A new WEB source is eligible to receive an annual floor allocation equal to the lower of the annual sulfur dioxide limit in the source’s approval order, or sulfur dioxide annual emissions calculated based on a level of control equivalent to BACT and assuming 100% utilization of the WEB source, beginning with the first full calendar year of operation and in accordance with the provisions of R307-250-7(6).

Comment: PacifiCorp included additional comments regarding the principles and equity issues that must be considered in the allocation process that are listed in section XX.E.3.a(1)(b) of the SIP. (William K. Lawson, PacifiCorp)

Response: The proposed SIP contains an allocation methodology for utilities. As described in the SIP, UDAQ is participating in on-going discussions to ensure that all of the principles and equity issues that are listed in the SIP have been addressed in this methodology. PacifiCorp’s perspective on how each of the principles and equity issues affect the allocation process will be an important part of the on-going discussions. No changes are recommended to the SIP text at this time.

Comment: It is not clear from the proposed SIP and the proposed rule language what threshold date applies to the controls eligible for this credit. The state should use 1/1/03 as the threshold date. (William K. Lawson, PacifiCorp)

Response: R307-250-7(5) states that the bonus allocations shall be available for reductions that occur between 2003 and the program trigger year. This is consistent with the 1/1/03 date recommended by PacifiCorp. The SIP language in XX.E.3.a(c)(i) should be clarified as follows. “Any WEB source that installs control technology and accepts new permit emissions limits that are, for a non-utility source, below its floor as established in this section, or, for a utility source, below BACT, may apply for an early reduction credit as outlined in R307-250-7(5). The credit will be available for reductions that occur between 2003 and the program trigger year. ...”

Comment: The renewable resource credit allocation is under review by certain stakeholders and subject to approval of the §309 states and stakeholders. PacifiCorp urges Utah to finalize all allocation issues affecting utilities at the same time. (William K. Lawson, PacifiCorp)

Response: The proposed SIP contains an allocation methodology for utilities, and an allocation methodology for renewable energy resources. As described in the SIP and in the response to earlier comments, UDAQ is participating in on-going discussions to ensure that the allocation process is fair and consistent with the goals of the backstop trading program. The renewable energy credit and the early reduction bonus allocation will be part of these discussions because the allocation process is a series of interlinked parts that cannot be considered individually.

FIRE PROGRAMS

Comment: Utah Farm Bureau Federation believes the Utah State Implementation Plan for compliance with the Regional Haze rule accurately portrays the surveyed emissions from agricultural burning. In addition, the conclusion that the requirements of 40 CFR 51.309(d)(6)(i) are met through the voluntary emission reduction techniques and local government controls coincides with the empirical and anecdotal evidence Farm Bureau has observed. However, we

believe the statement of agency action stated on page 64 of the SIP is attributed to a conclusion that does not bear out from the data. The SIP states: "Since agricultural burning has been documented in Section 3 to have an inordinate impact on visibility in Class I areas, the emission tracking activities will be conducted on a periodic basis...." We believe you have incorrectly stated the evidence of the data by utilizing the term "inordinate" and request you change the word to from "inordinate" to "insignificant." (Wes Quinton, Utah Farm Bureau Federation)

Response: The following change has been made in the text: "Since agricultural burning has been documented in Subsection [3]2.b above to ~~[have an inordinate impact on visibility in Class I areas]~~ be a very small proportion of total emissions in Utah and a very small proportion of agricultural burning in the West, the emission tracking activities will be conducted on a periodic basis to determine if any significant changes have been made ~~[to]~~ since the 2003 survey. "

Comments: Part G addresses fire emissions from federal, State, and private lands but creates disparate treatment between wildlands and agricultural lands. Utah's Enhanced Smoke Management Plan (ESMP) only applies to federal and State land managers while exempting the agricultural sector. We question whether this meets the intent of EPA requirements for state visibility plans. (Stephen P. Martin, Intermountain Region, National Park Service)

Response: The Western Regional Air Partnership (WRAP) and a survey conducted by Utah State University (USU) Extension indicate that agricultural burning is a very small portion of total emissions in Utah, and also of agricultural burning in the West. In 1996 a WRAP emission inventory found that Utah agricultural burning comprised approximately 1% of the WRAP total agricultural burning emissions and less than 1/4 of 1% of the total emissions in Utah. Since that time, a USU Extension survey indicates that agricultural burning activities have declined by 48% statewide since 1996. The survey, which is included in the Utah TSD, documents the reasons for the decline. The Regional Haze SIP does not create disparate treatment between wildlands and agricultural lands, nor are agricultural lands "exempted." Instead, it is consistent with our treatment of all other minor sources of air pollution, including minor industrial sources. For example, under R307-204 of the Utah Administrative Code, only prescribed fires that cover 20 acres or more per burn or result in air emissions of 0.5 tons or more per burn are required to submit a burn plan and burn request, and gain approval from the executive secretary before ignition. Land managers are allowed to ignite only when the clearing index is 500 or greater.

Comments: The State relied on an agricultural survey to determine future air quality management strategies. In addition, the State concluded that "there are no hot spots where agricultural burning in close proximity to a Class I area is likely to cause an inordinate impact". Neither the proposed plan or the Utah Technical Support Documentation Supplement (Utah TSD) explained the methodology and criteria used to support that conclusion. This conclusion is also used to dismiss closer examination and timely tracking of agricultural fire activities by the State. Given the regional nature of the visibility impairment problem, we question whether the notion of "proximity to a Class I area" is relevant for regional haze purposes. (Stephen P. Martin, Intermountain Region, National Park Service)

Response: The Agricultural Lands Inventory portion of Part G clarifies that the State will work collaboratively with the Utah Farm Bureau Federation and USU Extension to develop and implement an inventory and emissions tracking system for agricultural burning. The USU survey will be used as a baseline and emission tracking activities will

be conducted periodically to determine if any changes have occurred since the survey. Results from the inventory will be provided in future progress reports to EPA required every five years by 40 CFR 51.309(d)(10)(i).

Revisions have been made to the proposed plan to clarify DAQ's conclusions: ~~[An examination of the WRAP county by county inventory for agricultural burning makes clear that there are no "hot spots" where agricultural burning in close proximity to a Class I area is likely to cause an inordinate impact.]~~Emissions from agricultural burning are less than 0.25% of total Utah emissions and therefore do not result in significant impacts on visibility in the 16 Class I areas or on regional haze in general. Since agricultural burning emissions are minimal, agricultural land managers are currently not subject to the Utah Enhanced Smoke Management Plan.

DAQ notes that tracking, monitoring and understanding the effects of agricultural burning emissions--as well as all other fire emissions--are just getting underway in most states, and our understanding of these issues will improve over time. Monitors are now available in four of Utah's five Class I areas, and comparisons can be made in the future to better understand the sources of visibility impairment. These comparisons will be documented in periodic WRAP reports on the causes of haze. However, DAQ finds that the USU Survey provides the best current information regarding the extent and practices of agricultural burning in Utah.

Comments: The State also discusses the concept of developing an emissions inventory for agricultural lands, but does not detail an approach or a timeline for this activity. The NPS believes that inventory methods should be implemented to help assure data reliability and to create a record of activity for long-term evaluation and needs. The information that is collected would provide the State with the means to determine on an ongoing basis whether the State should consider strengthening air management oversight of these activities in the future to reduce impacts on regional haze at any Class I area, not just the 16 Class I areas on the Colorado Plateau. (Stephen P. Martin, Intermountain Region, National Park Service)

Response: Improvements are expected in tracking fire emissions, and our understanding of their impact on visibility also will improve. As per the five-year reports required under 40 CFR 51.309(d)(10)(i), there will be regular opportunity to consider whether changes are needed in managing fire activities.

POLLUTION PREVENTION AND RENEWABLE ENERGY

Comment: The problem of regional haze is just one symptom of our larger cultural dependence on fossil fuels and inefficient internal combustion engines. We need to reduce this dependence through an aggressive new combination of new energy sources as well as much greater energy efficiencies and conservation. I hope that Utah officials will demonstrate the wisdom, foresight and courage to change the status quo for the better to move us forward. Otherwise, with the explosion in human population and development in the St. George basin and elsewhere, the problems, including regional haze, will only worsen. (Richard Spotts, St. George)

Response: Noted.

Comment: We ask the State to include following Table 10 the following language from the Preamble to the federal regional haze rule. (William K. Lawson, PacifiCorp)

The goals themselves are not enforceable and States are not required to meet the renewable energy goals...Rather, EPA is setting enforceable requirements for the States to assess progress toward goals established by the GCVTC with respect to renewable energy production as a means for reducing dependence on more polluting forms of energy production. States participating in the GCVTC strategy are responsible for explaining why they cannot meet the GCVTC goals. The required reporting by the States will inform the public of air quality improvements that would result from that goal had it been realized. It is the relationship between renewable energy production and associated environmental effects (direct and indirect) that is the thrust of the assessment and reporting effort under the SIP. (64 FR 35754-55)

Response: This paragraph has not been added. This statement of the intent of 40 CFR 51.309(d)(8) matches our understanding but the Preamble carries the same weight whether or not it is included in the SIP and generally, we do not repeat language from the Preamble within the SIP.

Comment: In Appendix I, page 24, change the line to "PacifiCorp plans to purchase contracts for over 1,000 MW of renewables (such as wind, geothermal, and/or other resources)." Also, please check on the claim that, since Utahns pay 38% of our costs, then 38% of our renewable purchases will go towards meeting Utah's share of the WRAP's 10/20 renewables goals in Section 309. (William K. Lawson, PacifiCorp)

Response: Appendix I has been moved to the Technical Support Document, and the sentence has been changed. It is clear that the IRP is a plan that is updated annually or biennially, and therefore is subject to change in future iterations. The word "approximately" has been added before "38%" to indicate that this share varies somewhat from year to year. WRAP states have determined that renewable energy will be apportioned to each state in accordance with that state's purchase of renewables, rather than on the basis of renewables generated within the state.

Comment: Appendix I, page 27: "Each block a customer agrees to purchase costs \$1.95/month." (William K. Lawson, PacifiCorp)

Response: This change has been made.

Comment: Appendix I, page 27-28: Should be "Blue Sky" rather than "Blue Skies." (William K. Lawson, PacifiCorp)

Response: This change has been made.

Comment: The SIP appears to conclude that renewables and energy efficiency do little to decrease visibility impairing pollutants. (Nina Dougherty, Sierra Club)

Response: Renewables and energy efficiency bring on line additional electric power to meet the growing demands of the West without adding additional emissions that impair visibility.

Comment: The SIP emphasizes that Utah does not have to meet within the state the goals of having 10% of its power generation come from renewables by 2005 and 20% by 2015, nor of enhancing energy efficiency programs, because according to the SIP those goals are to be achieved on a regional, not a state basis. Utah is just supposed to contribute in some way to those

goals, but can proceed with increasing the percentage of coal used to generate electricity for Utah customers. (Nina Dougherty, Sierra Club)

Response: Because regional haze spreads widely across the West, the Grand Canyon Visibility Transport Commission determined that regional programs could best meet the goal of improved visibility in Class I areas. The Commission recommended that reductions of sulfur dioxide from large stationary sources be achieved through a regional cap and a backstop regional trading program. Similarly, the Commission recommended regional renewable energy goals. This regional approach is especially appropriate for electricity generation because the electricity to meet demand is not generated within each state, but rather is generated where it is most economical to do so. Expected increases in renewable energy production that are paid for by Utah consumers are identified in the Technical Support Documentation. Examination of the data in the Technical Support Document indicates that the proportion of energy generation for demand within Utah--as opposed to demand in other states that is supplied by electricity generation in Utah--increasingly will come from renewable sources, with the expectation that Utah will generate about 550 MW of new renewable generating sources by 2013. Those sources may well lie outside Utah's boundaries, but will be paid for by Utah consumers.

The Regional Haze Rule itself is not clear in how states submitting 309 SIPs should project their expected shares of the 10/20 goals, and several different methods are available. Until a methodology is agreed upon, Utah will rely on presenting the projections of renewable energy generation from individual programs, as are now available in the Technical Support Documentation. DAQ has chosen to estimate Utah's portion of peak summer demand, and estimates that Utah will be responsible for generating approximately that much renewable energy by 2013.

Comment: The states in the region are expected to contribute to the 10/20 regional goals, if not to achieve it. But surely, the states should do more than Utah to contribute to the regional goal. The SIP indicates that Utah has a huge untapped solar resource and impressive potential for wind generation in the state. Yet currently only 0.768% of its energy generation comes from non-hydro renewables (5.975% with Hydro). Geothermal is the main renewable used in Utah--39.8 MW in 2002--with landfill providing 1.6 MW, solar/PV 0.238 MW and wind 0.498. Even Utah's consumption of non-hydro renewable power from any source, whether in-state or out-of-state, is minimal - only 0.62%. Coal, on the other hand, was used to produce 87% of the electricity in Utah in 2002. (Nina Dougherty, Sierra Club)

Response: All western states have untapped sources of renewable energy potential. When those resources will be developed depends upon market forces. A significant portion of the electricity generated in Utah serves consumers in other states. Again, the 10/20 goals are goals, and the WRAP's Air Pollution Prevention Forum recommends measuring each state's contribution toward the goals by the renewable energy purchased by consumers within the state, no matter where the electricity is generated. The Technical Support Document indicates that the renewable energy purchased by Utah consumers in the future will increase substantially, to approximately 550 MW by 2013 and Part I.4.b indicates that will meet Utah's share of the regional goal.

Comment: The assumption regarding distributed energy is very limited--"In general, small loads located more than 3 miles from the transmission and distribution grid have the highest potential for being served cost effectively by on-site renewable power generation." PV is in fact useful and used where there is connection to the grid. (Nina Dougherty, Sierra Club)

Response: It is true that photovoltaics are used where there is connection to the grid, but the highest potential for their use is for small loads located at some distance from the grid.

Comment: Also of major concern is the assertion that increased use of renewables and energy efficiency would primarily replace generation by combined cycle natural gas in the region and would barely make a dent in generation by coal. The stated result of this is that renewable and energy efficiency programs would only result in minor reduction of NO_x and that no significant visibility changes can be shown because the resolution of the regional air quality modeling system is insufficient for such marginal emission reductions. Also, WRAP modeling suggests that increased use of renewables and energy efficiency does not reduce SO₂ emissions "because the regional SO₂ trading program proposed under the Annex is the controlling factor in reducing SO₂ emissions." (Nina Dougherty, Sierra Club)

Response: Which traditional sources of energy generation will be displaced by renewables and energy efficiency increases was a prediction by the model used by ICF for the WRAP. In the SIP updates of 2008, 2013, and 2018, improved projection methods, as well as improved air quality modeling, are likely to yield a more accurate understanding of the magnitude of NO_x reductions and their effect on visibility impairment. Finally, the SO₂ milestones are the limiting factor for SO₂ in the region. Renewable energy sources may be used to replace sources that emit SO₂, but the fact that renewables are the substitute generation source will not change the amount of SO₂ that is reduced.

Comment: The energy pollution prevention section of the SIP seems constructed to tell us that (1) Utah can continue on its minimal use of renewables and can depend on other states to do the right thing, and (2) that increased use of renewables and energy efficiency in the region will not do much to improve visibility. These are disturbing conclusions that can be rectified by (1) Utah doing more on renewables and energy efficiency, and (2) promotion of more aggressive renewable and efficiency programs in the region--and assuming that such programs will replace coal as well natural gas. (Nina Dougherty, Sierra Club)

Response: Utah's demand for renewable energy will increase substantially in the next decade, according to expectations presented in the Technical Support Documentation. This SIP and its accompanying documentation is the most complete assembly to date of information and projections regarding energy generation for Utah consumers, and is being published by DAQ as a stand-alone document so that interested parties can better understand what is happening today and whether additional policy decisions are needed regarding future energy production.

PROJECTION OF VISIBILITY IMPROVEMENT

Comment: We suggest revisions in Part K, in the paragraph following Table 22. The paragraph indicates that visibility improvements on the best days goes beyond the national visibility goal in the Clean Air Act. On the contrary, the Clean Air Act goal is in part "the remedying of existing impairment of visibility." Mesa Verde National Park should be included in the list of Class I's where visibility on the good days is expected to improve. The title of Table 23 might more appropriately be "Projected Visibility Changes..." rather than "Projected Visibility Improvement..." because half the 16 areas shown reduced visibility by 2018. (Stephen P. Martin, Intermountain Region, National Park Service)

Response: The 1996 numbers are not modeled information, as the table headings indicate, but rather are averages of actual monitored data for the years 1997-2001, collected from monitoring sites within or near the 16 Class I areas. For some sites, monitored data is available for the entire period; for other sites, only a single year of data was available. Because this information is not comparable with the modeled information in the column for 2018, the column of 1996 data in Tables 22 and 23 is being removed.

The 1996 column of data is not comparable to modeled values for two reasons. First, the base year for Section 309 SIPs--the year from which inventories of emissions were collected for use in the modeling--was 1996, and use of 1997 -2001 monitored information contributes nothing toward an understanding of how changes in emissions affect visibility. Second, use of a single or even several years of monitored data from which to understand changes in visibility impairment is inappropriate, because of the year to year variability.

Removing the 1996 column from the tables requires modifications in the accompanying text. The new text focuses on the required 309 comparisons of the modeled projections of visibility that are expected with and without the regional haze SIP. These indicate that visibility will be better on best and worst days with this SIP.

WRAP is making appropriate modifications in the tables in the WRAP Technical Support Document to correct the data.

ADDITIONAL CLASS I AREAS

Comment: The proposed plan does not include a section discussing other Class I areas, but the Executive Summary states that Utah has no additional Class I areas in response to the federal requirement under 40 CFR 51.309(g). For purposes of the initial plan, no additional Class I areas must be addressed, but the plan should indicate that the 2008 update must address out-of-state Class I areas not on the Colorado Plateau that may be affected by the transport of emissions from Utah. (Stephen P. Martin, Intermountain Region, National Park Service)

Response: 40 CFR 51.309(g) provides a mechanism to apply 309 control strategies to other Class I areas within states that submit SIPs under Section 309. Utah is the only state that is submitting a SIP under Section 309 that has no Class I areas outside the 16 Class Is on the Colorado Plateau. Other 309 States are declaring within their 309 SIPs whether they will address the additional Class I areas within their borders by implementing 309 strategies, or by following the provisions of Section 308. Utah will, of course, work with other states within the WRAP in addressing impairment in Class I areas outside Utah's borders.